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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,990	12/31/2001	Herbert M. Reynolds	1335.00008	4532
27305	7590	12/21/2004	EXAMINER	
HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101 39400 WOODWARD AVENUE BLOOMFIELD HILLS, MI 48304-5151			RAEVIS, ROBERT R	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 12/21/2004

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/035,990  
Filing Date: December 31, 2001  
Appellant(s): REYNOLDS ET AL.

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James R. Yee  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**

DEC 21 2004

**GROUP 2300**

This is in response to the appeal brief filed November 3, 2004.

**(1) Real Party in Interest**

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A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Claimed Subject Matter***

The summary of claimed subject matter contained in the brief is correct.

**(6) *Grounds of Rejection To Be Reviewed on Appeal***

The appellant's statement of the grounds of rejection to be reviewed is correct.

**(7) *Prior Art of Record***

3,147,617                      KAPTUR, JR., ET AL.                      09-1964

Ekern et al., "Kinetic Computer Modeling of Human Posture in Automotive Seats",  
Johnson Controls, Inc., pages 125-133, Document 970592, 1997.

**(8) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3,6-8,11-16,32-39,51-60,62-65 stand finally rejected under 35

U.S.C. 102(b) as being anticipated by Kaptur, Jr. et al.

Kaptur, Jr. teaches a design template is used to check a seat within a vehicle, the template including a torso section 108 representing a torso of an average size (see col. 2, line 4) adult, and inherently employing a posture (see Figure 1) and a waist (the waist viewable in Figure 6 adjacent the "108", and indirectly referred to in the teaching that the rear outer surface 110 of the pan 108 conforms to the contour of the outer surface of the back of a predetermined human male, on col. 3, lines 33-39). The template including at least one cross-sectional section of the torso cooperating with said torso section torso at the waist, the at least one cross-sectional section representing a cross-section of the torso and being generally at a right angle to the torso section and describing a body seat interface at the at least one anatomical landmark, the landmark being located on the body seat interface, the body seat interface described by the torso section and the at least one cross-sectional section being three dimensional. (Please see ATTACHMENT "A" which was mailed 8-3-04, the attachment illustrating that the template includes a torso section 108 (left hand side of attachment illustrating the waist) representing a torso, and cross-sectional section (which cross sectional section is a cross-section of the torso and being generally at right angle to the torso section 108 (i.e. waist) and describing a body seat interface at the waste, said cross-sectional section illustrated by the hatched surface in the view on the right-hand side of ATTACHMENT "A") of that same torso.)

As to claims 1-3,8,11,15,51-60, the "waist" may be deemed to be an anatomical landmark, as it defines the part of the human torso between the bottom of the rib cage and the pelvis.

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As to claims 6,7, note col. 4, lines 56-58, 66-75.

As to claims 11-14, Kaptur's reference to "accommodation checking" (col. 1, line 10) and "seat locations" (col. 1, line 35) are inclusive of all known seat positions, including all the way back.

As to claim 15,32,33,34,35,36,37,38,39,62-65, determination of whether a seat is "satisfactory" (col. 1, line 14) provides for a step in designing a seat, if not the seat itself. Also, regions (patches) of the seat are for support portions of the template.

As to claim 16, note the curved portion of pan 108 in Figure 1.

Claims 9 and 61 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Kaptur et al in view of Ekern et al.

Comments that exist above similarly apply here.

As to claims 9 and 61, it would have been obvious to employ an occupant restraint system upon Kaptur's template because Ekern teaches (p. 125, left column, first paragraph of the "INTRODUCTION") that "restraint positioning" is a factor in accurately locating seated occupants in a vehicle, suggestive of application of a restraint system in Kaptur to assure that the template is properly positioned.

Claims 4,5,10,17-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**(9) Response to Argument**

As to p. 12, lines 9-12, Kaptur's template "simulates" (col. 1, line 72) a "human male" (col. 2, line 3), and pan 108 is "shaped to conform to the contour of the outer

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surface of the back of the predetermined *human male*" (italics added, lines 35-37). The pan 108 provides for a torso section (as illustrated by element 108 in either Figure 5 or ATTACHMENT "A") and cross-sectional section (as illustrated by the hatched area in ATTACHMENT "A").

As to p. 13, third full paragraph, the claimed subject matter is devoid of any "slots or cut-outs" and assembly.

As to p. 13, 4<sup>th</sup> full paragraph, the claims do not state that the elements include "separate" (line 5 from bottom of the page) sections, which sections would then be (somehow) patentably distinct from Kaptur's single piece three-dimensional back pan. Claim 1 calls for a torso section representing a torso, and a cross-sectional section of that same torso. Kaptur teaches an element that has different sections.

As to p. 13, last paragraph, the claims do not call for two pieces ("two piece" (line 4 from bottom of the page)) as argued, and any alleged advantage ("advantages" (line 3 from bottom of the page) based upon the two pieces is negated in that event.

As to p. 14, top paragraph, the claims do not call for constructing the two sections and then subsequently combining ("These are then combined" on line 5 of p. 14) them to form a model.

As to p. 14, second paragraph, the claims do not call for a "separate" cross-sectional section of the torso. The claims call for a template that has a torso section 108 representing a torso, and at least one cross-sectional section of that same torso 108. It would appear that Appellants are stating that sections are different/distinct structural components, but selection of the term "section" to define structure provides for

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a much broader meaning, especially when one section represents a torso, and the other section is a section of that same torso.

As to p. 15, first paragraph, the claims do not call for a "separate" cross-sectional section of the torso. The claims call for a template that has a torso section 108 representing a torso, and at least one cross-sectional section of that same torso 108. Please look at the ATTACHMENT "A". The hatched-marked region illustrates a cross-section of the torso of Figure 6. The claims do not provide for any explanation regarding the axes that define the "right angle" (claim 1), and of course there is a torso section of the torso that is at a right angle to the hatched-mark region.)

As to p. 15, 2<sup>nd</sup> full paragraph, the claims do not call for a "two piece design" as argued. Please look at claim 1, which broadly refer to a combination "torso section representing a torso" (line 2 of claim 1) and "cross-sectional section" (line 5 of claim 1) of that *same* torso ("of the torso", on line 5 of claim 1), one being a "right angle" (line 7, claim 1) to the other. Kaptur's element 108 certainly has portions sections that are at right angles to one another. As shown in the ATTACHMENT "A", the cross-sectional section (hatched mark region) is at right angles to the torso section (the waist) of the torso.

As to p. 16, 1<sup>st</sup> full paragraph, these arguments have been addressed above.

As to p. 16, last paragraph, please look at Figure 1 of Kaptur, where you may plainly see a planar region under the accelerator, a seat (that has a stiffness, certainly from selected material), a portion 134/136 where a human head would be. Please note that the rejection in issue calls your attention to Figure 1.

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As to p. 17, 3rd<sup>1</sup> full paragraph, these arguments have been addressed above.

As to p. 17, last paragraph, please look at Figure 1 of Kaptur. Only a portion of the seat contacts the template (like at regions indicated by lines 66 and 108) indicative of "load supporting contours", and other portions of the seat are not in contact with the same template indicative of "unloaded patches" of that same seat. Figure 6 illustrates the waist, and certainly suggests that the width of the waist is now wider than the width of the seat back 22. This structure is readily apparent in figures 1,6.

As to p. 18, last full paragraph, these arguments have been addressed above.

As to p. 18, last paragraph, it should be safe to say that either the "seat cushion 20" or "seat back 22" has a "seat cushion length" (line 2 from bottom of p. 18 of Brief). This is illustrated in Figure 1.

As to p. 19, 3rd full paragraph, these arguments are addressed above.

As to p. 19, last two paragraphs and continuing on to p. 20, please look at Figure 1 of Kaptur, where you may plainly see a planar region under the accelerator, a seat (that has a stiffness, certainly from selected material), a portion 134/136 where a human head would be. Please note that the rejection in issue calls your attention to Figure 1. This is readily apparent in Figure 1.

As to p. 20, last full paragraph, these arguments are addressed above.

As to p. 21, top paragraph, please look at Figure 1 of Kaptur. Only a portion of the seat contacts the template (like at regions indicated by lines 66 and 108) indicative of "load supporting contours", and other portions of the seat are not in contact with the same template indicative of "unloaded patches" of that same seat. Figure 6 illustrates



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the waist, and certainly suggests that the width of the waist is now wider than the width of the seat back 22. This structure is readily apparent in figures 1,6.

As to p. 22, 1st full paragraph, these arguments are addressed above.

As to p. 22, third paragraph, please note that Kaptur, Jr. teaches a "accommodation checking device" (The title) used to check a seat within a vehicle that includes an unlabeled patch on the seat (note all of torso 108 contacts the seat in Figure 1) and a seat cushion (cushion 22 or even 20, take your pick) length. These are readily apparent in Figure 1.

As to p. 24, second full paragraph, these arguments are addressed above.

As to p. 24, third full paragraph, Ekern was not applied for the application of a "two piece design" (line 4 from bottom of p. 24) teaching. Regardless, the claim does not call for a "two-piece" design. It calls for a cross-sectional section being at a right angle to the torso section, which may be one in the same piece, as discussed above in the rejection applied against claim 1.

As to p. 25, 3<sup>rd</sup> and 4<sup>th</sup> full paragraphs, Kaptur includes a one-piece back pan 108, but that same pan 108 includes sections as claimed.

In conclusion, the broadest issue seems to be whether Kaptur teaches two sections ("a torso section" and a "cross-sectional section") of the *same* torso. Please look at Figures 1 and 6, and see that the same torso (pan 108) of course includes two sections. It includes many more sections than two. The "cross-sectional section" is illustrated in the hatched marking in ATTACHMENT "A", while the "torso section" is illustrated along the waist 108 in the same ATTACHMENT "A". Both these "sections"

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are at right angles to one another, as the horizontally positioned waist 108 is perpendicular to the hatched markings. It would appear that Appellants are now arguing that the sections are now two different pieces ("two piece", on line 3 from bottom of p. 13) that may be joined together by "slots or cutouts" (line 11 from bottom of p. 13) to provide some sort of benefit ("advantages", on line 3 from bottom of p. 13). However, the claims do not call for separate (connectable) pieces, and thus do not support any benefit.

For the above reasons, the rejections of record should be sustained.

Sincerely,



Robert Raevis

AU2856

Conferee Brian Sircus:



Conferee Hezron Williams:

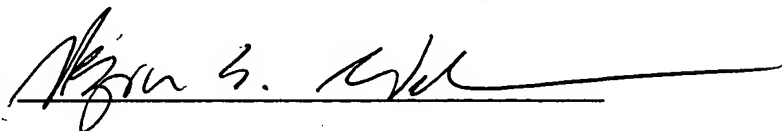


FIG. 1.

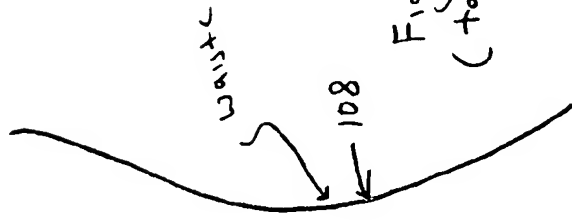
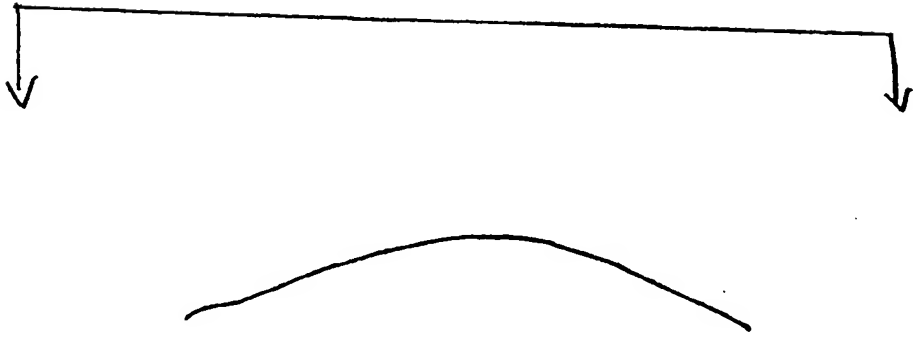


Fig. 6  
(torso only)

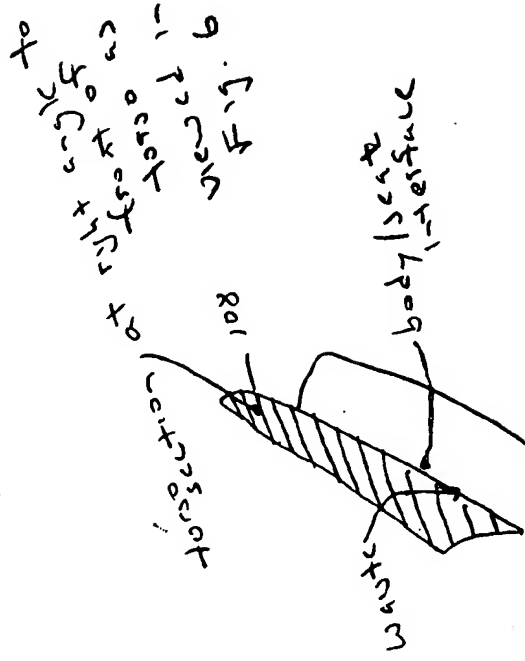


Fig. 1

(torso, cross-section  
seat only)

ATTACHMENT "A"